

TRENCH ISOLATION METHOD

Abstract of the Disclosure

5 In a trench isolation method, an etching mask pattern for forming a trench is formed on a semiconductor substrate. The substrate is etched to form a trench. An insulating layer is formed to fill the trench, and then a material layer is formed on the insulating layer. In this case, the material layer is made of material formed at a high temperature to densify the insulating layer. The material layer and the insulating layer are
10 planarly etched and the etching mask pattern is removed, so that a trench isolation layer is completed. Accordingly, although a densification process is avoided, it is possible to form a device isolation layer having a favorable surface profile.

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